

ABSTRACT OF THE INVENTION

In modular design flow, logic designers are able to partition a top-level logic design for a PLD into modules and implement any module independently from other modules. Modules are mapped, placed, and routed using selected information derived at the time the top-level logic design is partitioned. Finally, the modules are integrated into the top-level logic design using a guided process. Specifically, the information generated during the partitioning of the top-level design and the implementation of each module is used to guide the implementation of the associated logic in the top-level design. In this manner, the implementation of all modules can proceed in any order or in parallel and the integration of the modules into the top-level design can be done quickly and in any order.

FOUO 43162860